UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
INSECTICIDE DIVISION

Patent List No. 37

A LIST OF
UNITED STATES PATENTS

Issued from 1917 to 1933 inclusive

relating to

APPARATUS FOR WASHING INSECTICIDE RESIDUES FROM FRUITS AND VEGETABLES
PART II SCRUBBERS & ASSORTERS

Compiled by

R. C. Roark

Washington, D.C.
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A LIST OF UNITED STATES PATENTS ISSUED FROM 1917 TO 1933, INCLUSIVE, RELATING TO APPARATUS FOR WASHING INSECTICIDE RESIDUES FROM FRUITS AND VEGETABLES

Compiled by

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Insecticide Division, Bureau of Entomology And Plant Quarantine.

The sixty-seven devices briefly described in this list include apparatus for separating seeds from foreign matter, for peeling potatoes, for removing maggots from blueberries, for scrubbing lead arsenate spray residue from apples, etc.

Every effort has been made by the compiler to make this list of patents complete and no discrimination is intended against any patent mention of which is inadvertently omitted.

The Department of Agriculture assumes no responsibility for the merits or workableness of any of the patents, nor does it recommend any of the inventions listed.

1,252,833 (Jan. 8, 1918; appl. May 15, 1917). GRAVITY FRUIT-SEPARATING APPARATUS. George D. Parker, Riverside, Calif. - This invention relates to fruit separators of that type wherein the fruit bodies to be separated are dropped from a predetermined level into a tank containing a circulating fluid body and a submerging separating member, and wherein the fruit in accordance with its submergence in the liquid, dependent on its specific gravity, travels in the fluid at different angles and either clears the separating member or is carried by the fluid flow beneath the same, the particular type of apparatus being set forth in U. S. patent 1,186,677, granted to G. D. Parker, June 13, 1916.

1,263,672 (Apr. 23, 1918; appl. Oct. 30, 1917). POTATO-PEELER. John M. Howorth, Wausau, Wis. - This potato peeler is provided with means for spraying the potatoes to clean them after they are peeled.

1,285,560 (Nov. 19, 1918; appl. Apr. 14, 1917). GRAVITY FRUIT-SEPARATOR. Frank F. Chase, Riverside, Calif. - This machine utilizes the difference in specific gravity of frosted and non-frosted citrus fruits in separating them by means of a current of water.

1,286,554 (Dec. 3, 1918; appl. Aug. 27, 1918). PEA-SEPARATOR. Gerret H. Dekker, Adell, Wis. - A machine for cleaning and scouring peas or like material, and for separating sound peas from split or imperfect peas, pods, thistles and other refuse matter which may be associated with the peas subsequent to the hulling operation is described. It is an improvement over the separator described in U. S. patent 915,832 issued Mar. 23, 1909 to G. H. Dekker.

1,295,172 (Feb. 25, 1919; appl. July 11, 1918). FRUIT-SEPARATOR. Hugh H. Jackson, Los Angeles, Calif. - West Highlands Citrus Association, West Highlands, Calif. - This invention pertains to fruit separators of the character employing a liquid, such as water, the fruit being discharged from a given level in the water and a current being set up so that the fruit will be separated in accordance with its angle of rise from the level of release of the fruit, the angle of rise depending upon the rate of flow of the current and the specific gravity of the fruit bodies.

1,304,716 (May 27, 1919; appl. Sept. 13, 1917). POTATO-PARING MACHINE. John M. Strauzas and John Kulluk, Rockford, Ill. - This peeler for potatoes or other vegetables is provided with means for washing the vegetables with water.

1,312,098 (Aug. 5, 1919; appl. Apr. 10, 1918). APPARATUS FOR SORTING ARTICLES ACCORDING TO RELATIVE BUOYANCY. Antonio Cerruti, San Francisco, Calif. - A machine for sorting fruits and vegetables and their seeds is described.

1,312,381 (Aug. 5, 1919; appl. Dec. 13, 1918). DEVICE FOR CLEANING AND REMOVING THE SKINS FROM DRIED FRUITS, SUCH AS PEACHES, APRICOTS, ETC. Hermanus A. Beekhuis, Fresno, Calif. - California Peach Growers Inc., Fresno, Calif. - Dried fruits, such as peaches, apricots and nectarines, are cleaned and the skins removed in this machine after they previously have been immersed in a heated solution of one part of sodium bicarbonate in fifty parts of water.

1,350,973 (Aug. 24, 1920; appl. Dec. 27, 1919). SEED-SEPARATING DEVICE. Winfield S. Jeffries, Great Falls, Mont. - A device for the separation of wheat grains from the foreign seed matter therein and also for separating the smut grains from the wheat grains is described.

1,351,711 (Aug. 31, 1920; appl. Jan. 28, 1919). POTATO-PEELER. Samuel J. White, Haleyville, Ala. - A device for peeling and washing potatoes or other vegetables is described.

1,360,335 (Nov. 30, 1920; appl. June 23, 1919). GRAIN-CLEANER. Edward M. Warrenfeltz, Funkstown, Md. - Leon R. Yourtee, Hagerstown, Md., and Charles H. Dentler, Funkstown, Md. - This invention relates to methods and apparatus for the separation of grain, such as wheat and the like, from foreign matter, such as garlic, cockle and other screenings which are lighter than grain. The method consists in feeding the grain into a tank of water, causing the foreign matter to separate from the grain and to float on the surface of the water, and skimming the surface of the water in the tank by causing the film of water containing the foreign matter to discharge into a drain by overflowing.

1,362,896 (Dec. 21, 1920; appl. Feb. 9, 1920). GRAIN-SEPARATOR. Charles A. Rieck, Delano, Calif. - A device wherein the chaff and small faulty grain is separated from the heavy desirable or useful grain through the medium of water, by depositing or dumping the grain to be separated on the surface of a body of running water, whereby the light, waste grain will float on the surface of the water and will be carried through a waste pipe to a suitable place of deposit; while the heavy useful grain will not float and will drop by gravity to the bottom of the water tank and will be saved is described.

1,374,657 (Apr. 12, 1921; appl. Sept. 4, 1919). METHOD OF SEPARATING FRUIT-PITS AND THEIR KERNELS. Stanley Hiller, San Francisco, Calif. - This invention contemplates the use of means of cracking pits to liberate the kernels therefrom, thereafter subjecting the shells and kernels to a fresh water bath, and then grading them in brine, continuously drawing off the shells from the top of the brine, and kernels from the bottom of the tank.

1,381,510 (June 14, 1921; appl. Aug. 13, 1919). VEGETABLE-WASHER. Ogden S. Sells, Buffalo, N. Y. - Peerless Husker Co., Buffalo, N. Y. - This invention relates to a machine for removing objectional material from vegetables or other food products and is more particularly adapted for removing dirt and corn silk from husked ears of corn.

1,394,138 (Oct. 18, 1921; appl. Nov. 16, 1918). PROCESS OF PEELING FRUITS AND VEGETABLES. William D. Bost and Harry M. Miller, Los Angeles, Calif. - Harry M. Miller, Los Angeles, Calif. - Vegetables or fruits to be canned or dehydrated such as peaches or tomatoes are peeled by subjecting them to the action of an alkaline solution, e. g. sodium hydroxide, calcium oxide or calcium hydroxide, which may vary in strength from 0.01 percent to saturated at a temperature which may vary from approximately -10°C. to 150°C. for a period of from one second to 48 hours. The skins and excess alkali are washed off with water and any alkali remaining on the surface of the fruit is neutralized in an acid bath, e. g. hydrochloric or acetic acids, which may vary in strength from 0.01 percent to saturated, after which the fruit is again washed to remove any salt and free acid on it. Apparatus is shown.

1,403,092 (Jan. 10, 1922; appl. Aug. 13, 1919). GRAIN-WASHING MACHINE. Carl P. Miller and Ralph R. Lee, Fargo, N. Dak. - A machine for removing smut from grain as well as also removing foreign seeds therefrom is described.

1,409,802 (Mar. 14, 1922; appl. Feb. 4, 1918). APPARATUS FOR AND PROCESS OF STEMMING FRUIT. William E. Urschel, Valparaiso, Ind. - A stemmer for cherries, plums, apricots, etc. is described.

1,409,803 (Mar. 14, 1922; appl. May 29, 1918). APPARATUS FOR AND PROCESS OF STEMMING FRUIT. William E. Urschel, Valparaiso, Ind. - A device for stemming fruit is described.

1,409,804 (Mar. 14, 1922; appl. Nov. 29, 1918). MACHINE AND PROCESS FOR STEMMING FRUIT. William E. Urschel, Valparaiso, Ind. - A device for stemming fruit is described.

1,415,985 (May 16, 1922; appl. Oct. 3, 1921). METHOD OF SEPARATING FRUIT FROM LEAVES. Jerry Buckley, Mills, Calif. - A device for separating fresh prunes or other fruit from leaves and twigs and for washing the fruit to remove dirt and dust by immersion in water is described.

1,421,750 (July 4, 1922; appl. Aug. 30, 1920). PROCESS OF TREATING VEGETABLES IN PREPARATION FOR CANNING. Walter W. Willison, Hastings, N. Y. - Thermokept Products Corp., New York, N. Y. - A vacuum apparatus for blanching vegetables such as asparagus, beans, peas, spinach and the like preparatory to canning is described.

1,430,293 (Sept. 26, 1922; appl. Feb. 13, 1920). GRAIN AND SEED GRADER AND SEPARATOR. Edgar D. Eddy, Ottawa, Ontario, Canada. - A device for separating grain or seeds from foreign matter and sorting them into grades by specific gravity is described.

1,441,161 (Jan. 2, 1923; appl. May 27, 1922). CLEANER FOR POTATOES AND THE LIKE. William M. McCabe, Philadelphia, Pa. - This invention provides a slotted cylinder for receiving the potatoes or other article to be cleaned, through the slots of which said articles will sufficiently protrude to permit the surfaces thereof to be acted upon by a suitable brush.

1,457,218 (May 29, 1923; appl. Jan. 24, 1922). METHOD OF AND APPARATUS FOR AUTOMATICALLY CLEANING, SCALDING, AND PEELING FRUIT. Alfred I. Du Pont, Wilmington, Del. and Hiram R. Harding, Baltimore, Md. - Harding Peeling Machine Co., Wilmington, Del. - Apparatus for the initial washing and scalding of tomatoes to be canned and for feeding them on a conveyor which carries them through the peeling machine is described.

1,460,648 (July 3, 1923; appl. May 23, 1919). METHOD OF PURIFYING GARLICKY WHEAT. John E. Gaskill, St. Louis, Mo. - Garlic bulblets are separated from wheat by flotation in liquid of suitable specific gravity.

1,464,511 (Aug. 14, 1923; appl. Jan. 3, 1922). METHOD OF AND APPARATUS FOR SEPARATING DATES. Alexander W. Stott, Brooklyn, N. Y. - Hills Brothers Co., Inc., N. Y. - Dates may be treated with hot water before or during subjection to centrifugal action, thus thoroughly washing and separating them.

1,474,284 (Nov. 13, 1923; appl. Feb. 8, 1923). VEGETABLE CLEANER AND SEPARATOR. George J. Olney, Westernville, N. Y. - A cleaner and assorter is described for peas and other vegetables or fruit of which the poor float in water or other liquid and the good sink or tend to sink.

1,476,221 (Dec. 4, 1923; appl. Sept. 7, 1921). POTATO PEELING AND WASHING MACHINE. Samuel Roylance, New Bedford, Mass. - A device whereby quantities of potatoes may have their skins removed rapidly and effectively and the potatoes thoroughly washed so that all skins, dirt and foreign matter are removed is described.

1,486,351 (Mar. 11, 1924; appl. Oct. 15, 1921). VEGETABLE AND FRUIT ROASTING AND CLEANING MACHINE. Benjamin F. Malone, Monticello, Ga. - Apparatus for roasting and cleaning fruits and vegetables, particularly pimiento peppers, is described.

1,491,211 (Apr. 22, 1924; appl. Apr. 26, 1923). DISTRIBUTING AND CLEANING DEVICE FOR FRUIT AND THE LIKE. Charles O. Taylor, Corvallis, Ore. - A device is described by which small fruit, such as berries, is first cleaned or washed and then distributed onto sorting belts where the imperfect fruit is removed by hand.

1,502,852 (July 29, 1924; appl. Dec. 11, 1923). WASHING PROCESS AND MACHINE THEREFOR. Ralph Harvey, Etna, Pa. - A machine intended to be used for washing tuberous vegetables such as beets, carrots, potatoes, etc., is described.

1,507,951 (Sept. 4, 1924; appl. Feb. 13, 1924). DEVICE FOR REMOVING LEAVES FROM FRUIT-CLEANING LIQUID. Jerry Buckley, Mills, Calif. - A device for separating fruit, after being picked from the trees, from the leaves, twigs and other foreign matter inevitably accompanying the fruit is described. It is an improvement on that described in U. S. patent 1,415,985 issued May 16, 1922 to J. Buckley.

1,515,908 (Nov. 18, 1924; appl. Sept. 17, 1924). PROCESS FOR THE REMOVAL OF MAGGOTS, INSECTS, GREEN BERRIES, TRASH, AND SIMILAR OBJECTS FROM BLUEBERRIES. Charles H. Stephenson, Washington, D. C. - United States Government and People of the U. S. - The object of this invention is to remove by skimming the green and immature blueberries, bunches of berries, insects, and trash of such kinds as will float and thus eliminate hand-picking of blueberries. A further object is to remove maggots from blueberries through the application of heated water.

1,521,787 (Jan. 6, 1925; appl. Feb. 14, 1921). MACHINE FOR SEPARATING AND GRADING SEEDS AND GRAINS. Milton S. Nesbitt, Payette, Idaho. - A machine with which seeds and grain having weed seeds or other noxious matter therewith are precipitated into a flowing stream of water and separation is accomplished by settling, the seeds of different specific gravity being collected at different points is described.

1,544,894 (July 7, 1925; appl. Oct. 29, 1924). MACHINE FOR FREEING BLUEBERRIES FROM PARASITES. Emery F. Farnsworth, South Portland, Maine - Blueberries are freed of parasites by immersing them in water at a temperature of 125° F., whereupon the parasites leave the berries and sink to the bottom. Suitable apparatus is described.

1,562,929 (Nov. 24, 1925; appl. May 9, 1923). POTATO-HANDLING DEVICE. Andrew Trovaton, Thief River Falls, Minn. - This invention relates to a potato handling device which is adapted to travel through the field, and to facilitate the work of picking up, sorting and bagging potatoes or the like.

1,572,055 (Feb. 9, 1926; appl. May 27, 1921; renewed May 14, 1925). METHOD AND APPARATUS FOR CLEANING, SEPARATING, AND GRADING SEEDS AND OTHER BODIES. Harry R. Warren, Wabuska, Nev. - Warren Seed Cleaning Co., Reno, Nev. - A method of separating seeds from weed seeds and other foreign matter is described.

1,609,636 (Dec. 7, 1926; appl. Apr. 7, 1922). METHOD AND APPARATUS FOR SEPARATING SEED AND OTHER BODIES. Harry R. Warren, Wabuska, Nev. - Warren Seed Cleaning Co., Reno, Nev. - Apparatus for separating good seeds from weed seeds and foreign material is described.

1,615,700 (Jan. 25, 1927; appl. Feb. 2, 1926). PROCESS FOR THE REMOVAL OF MAGGOTS FROM BLUEBERRIES. Burton J. Howard and Charles H. Stephenson, Washington, D. C. - United States Government and People of the U. S. - Blueberries are revolved in hollow, screen cylinders partially submerged in water, whereupon the maggoty berries are crushed by the grinding of the berries together and the maggots and debris are washed away.

1,643,596 (Sept. 27, 1927; appl. Nov. 1, 1926). DEVICE FOR SEPARATING POTATOES FROM FLOATABLE FOREIGN MATTER. Roscoe C. Zuckerman, Stockton, Calif. - A pre-cleaning apparatus especially intended to initially handle the potatoes before they are passed to the washing and scouring tank is described.

1,661,140 (Feb. 28, 1928; appl. Sept. 9, 1926; in Netherlands Jan. 13, 1925). PROCESS OF STERILIZING VEGETABLE PRODUCTS. Pieter J. G. Nell, The Hague, and Dirk J. Schouten, Lisse, Netherlands. - Apparatus for sterilizing bulbs and other vegetable products by exposing them to hot water at a temperature of about 110° F. for some hours is described.

Re. 16,981 (May 29, 1928; appl. Feb. 4, 1928; original 1,572,005, Feb. 9, 1926; appl. May 27, 1921; renewed May 14, 1925). METHOD AND APPARATUS FOR CLEANING, SEPARATING, AND GRADING SEEDS AND OTHER BODIES. Harry R. Warren, Chicago, Ill. - Warren Seed Cleaning Co., Reno, Nev. - This is a reissue of U. S. patent 1,572,055.

Re. 17,003 (June 19, 1928; appl. Feb. 15, 1928; original 1,609,636, Dec. 7, 1926; appl. Apr. 7, 1922). METHOD AND APPARATUS FOR SEPARATING SEEDS AND OTHER BODIES. Harry R. Warren, Chicago, Ill. - Warren Seed Cleaning Co., Reno, Nev. - This is a reissue of U. S. patent 1,609,636.

1,677,015 (July 10, 1928; appl. Apr. 18, 1927). BEAN SEPARATOR. Curran S. Benton, Port Huron, Mich. - This invention relates to a separator and more particularly to the class of gravity separators for use in separating imperfect beans, peas, grains, and seeds from perfect beans, peas, grains and seeds, or the like.

1,681,627 (Aug. 21, 1928; appl. Dec. 15, 1922; renewed Mar. 19, 1927). PROCESS AND APPARATUS FOR CLEANING BERRIES. Joseph W. Sawyer, Millbridge, Maine - A machine adapted for use in separating ripe berries fromthose that are unripe and imperfect and also from leaves, twigs, insects or the like which may be present with the berries after being picked is described.

1,683,703 (Sept. 11, 1928; appl. Sept. 8, 1924). PROCESS OF SEPARATING THISTLE BUDS FROM PEAS. Ogden S. Sells, Hoopeston, Ill. - Sprague-Sells Corp., Hoopeston, Ill. - A process of separating thistle buds from peas prior to putting the peas through the necessary step of preparation for canning is described.

1,684,896 (Sept. 18, 1928; appl. Jan. 31, 1927). FRUIT SCRUBBER. Fred Stebler, Riverside, Calif. - A brush roll machine for scrubbing fruit, e. g. apples on which there is lead arsenate residue, is described.

1,688,678 (Oct. 23, 1928; appl. Nov. 13, 1925; in Mexico Dec. 24, 1924). PROCESS OF CLEANING THRASHED CEREALS. Alberto Altamirano, Mexico City, Mexico - Moises Solana, Mexico City, Mexico - This invention relates to a process of cleaning thrashed raw corn, particularly corn intended for subsequent boiling in lime water, in order to convert it into the so-called "nixtamal" which is an old Mexican name for Indian corn or maize that has been boiled in lime water in order to soften the rather hard skin and also the starch of the grain.

1,708,057 (Apr. 9, 1929; appl. May 13, 1924). PROCESS OF CLEANING AND SEPARATING VEGETABLES FOR CANNING. Louis C. Gehring, Pittsburgh, Pa. and James F. Denman, Circleville, Ohio. - This invention relates to a process of thoroughly and expeditiously removing foreign matter, hulls and the like from vegetables, of the type of peas or beans.

1,708,253 (Apr. 9, 1929; appl. Apr. 24, 1925). METHOD OF CLEANING AND PRECOOLING VEGETABLES FOR SHIPMENT. John W. Bell and Thomas J. Bell, Lake Monroe, Fla. - A method and apparatus for cleaning and precooling vegetables, such as celery, peppers, and others, so as to remove therefrom fibrous roots, adhering soil or superfluous leaves or other undesirable matter, and at the same time to precool and prepare the vegetables so that they will be better preserved during shipment and be ready for use upon reaching the market is described.

1,714,313 (May 21, 1929; appl. July 5, 1924). APPARATUS FOR AUTOMATICALLY PEELING AND WASHING FRUITS AND VEGETABLES. Benjamin Meisler, New York, N. Y. - Vegetables and fruits which are peeled in this machine are at the same time washed by a spray of water.

1,747,002 (Feb. 11, 1930; appl. Sept. 20, 1924). METHOD OF AND APPARATUS FOR REMOVING THE OUTER COVERINGS OF VEGETABLES AND THE LIKE. Henry E. Hamilton, Frederick C. Krueger, and Adolph Hamilton, New London, Wis. - Henry E. Hamilton, New London, Wis. - A leafing machine especially adapted for removing the outer leaves from the heads of cabbages and similar vegetables after such vegetables have been cored and the outer leaves thereof loosened is described.

1,757,103 (May 6, 1930; appl. July 25, 1927). SEPARATOR. Albert P. J. Voight, Galveston, Tex. - This invention relates to a separator for separating the kernels from the shells of cracked nuts.

1,760,041 (May 27, 1930; appl. Mar. 24, 1928). CLEANING AND WASHING DEVICE. Mead S. Carmichael, Sparta, Wis. - Scott-Viner Co., Columbus, Ohio. - A device for cleaning or blanching peas or other edible articles is described.

1,769,664 (July 1, 1930; appl. Mar. 26, 1927). FRUIT-CORING AND STEM-REMOVING METHOD AND APPARATUS. Arthur L Duncan, Piedmont, Calif. - Acme Canning Machines Co., Reno, Nev. - This invention relates to methods and apparatus for coring and stemming fruits such as pears, apples and the like that have been cut into halves on longitudinal planes.

1,770,916 (July 22, 1930; appl. Sept. 8, 1928). FRUIT GRADING AND POLISHING APPARATUS. Thomas F. Griffin and Frank Smith, Pinehurst, N. C. - An attachment for fruit graders which may be readily applied to various types of graders for insuring the removal of dust or dirt from the surface of the fruit (peaches), and permitting the polishing and brushing of the fruit for removing scale, fuzz and smut is described.

1,811,991 (June 30, 1931; appl. Jan. 11, 1928). FRUIT SORTER AND CLEANER. George G. Bates, Kingston, N. Y. - A machine for sorting, grading and cleaning or polishing fruit, such as apples, oranges, etc., and intended to be operated either by hand or power is described.

1,834,018 (Dec. 1, 1931; appl. July 20, 1927). FRUIT WASHING MACHINE. Jasper C. Coates, Santa Paula, Calif. - Warren Crocker and H. G. Benison, Ventura County, Calif. - A machine employing a rotary bottom brush table and side and top brushes all arranged to provide a plurality of runways for fruit, the latter being propelled through the runways under rotary movement of the brush table is described.

1,871,359 (Aug. 9, 1932; appl. Mar. 11, 1929). BLANCHING AND CLEANING DEVICE. Mead S. Carmichael, Sparta, Wis. - A device for blanching, washing and cleaning peas or other edible articles is described.

1,879,439 (Sept. 27, 1932; appl. Feb. 20, 1931). VEGETABLE CLEANER AND SEPARATOR. George J. Olney, Westernville, N. Y. - This device is an improvement over that described in U. S. patent 1,474,284 issued to G. J. Olney.

1,889,189 (Nov. 29, 1932; appl. Oct. 4, 1930). METHOD OF AND APPARATUS FOR SCRUBBING VEGETABLES. Henri Bernier, Oakland, Calif. - California Packing Corp., San Francisco, Calif. - This invention relates to a method of cleaning and scrubbing vegetables of a cylindrical form, such as for example asparagus, radishes, carrots and the like.

1,899,209 (Feb. 28, 1933; appl. July 26, 1930). GRAIN CLEANING MACHINE. Victor M. Petitt, Rojas, Argentina. - A machine for cleaning and grading grain is described.

1,899,632 (Feb. 28, 1933; appl. Mar. 13, 1931). GRAVITY OPERATING DEVICE FOR SORTING FRUITS AND VEGETABLES. George J. Olney, Westernville, N. Y. - This invention relates to a liquid-using and gravity-operating machine for sorting and cleaning fruit or vegetables.

1,911,102 (May 23, 1933; appl. July 7, 1928). METHOD AND APPARATUS FOR CLEANING FRUIT. Carol B. Ballard, Tampa, Fla. - Sprague-Sells Corp., Hoopeston, Ill. - Citrus fruit is mixed, before treatment in this apparatus, with a cushioning compound made up of sifted cedar sawdust, paraffin and benzoate of soda to protect the fruit against abrasion or puncture from the brushes, take up any moisture on the fruit and act as a preservative.

1,916,633 (July 4, 1933; appl. Sept. 23, 1929). PROCESS AND APPARATUS FOR CLEANING FRUIT. Harry A. Mulvany and Harry E. Kennedy, Berkeley, Calif. - A blast of material such as sawdust is used to remove lead arsenate residue from fruit and to polish the fruit.

1,924,098 (Aug. 29, 1933; appl. Jan. 30, 1932). FRUIT GRADER AND CLEANER. George G. Bates, Kingston, N. Y. - This device is an improvement over that described in U. S. patent 1,811,991 issued June 30, 1931 to G. G. Bates.

1,937,851 (Dec. 5, 1933; appl. Apr. 10, 1931)METHOD OF TREATING PEAS AND BEANS. John H. Stansbury, Fruitland, Md. - Ralph O. Dulany, Fruitland, Md. - A method and apparatus for cleaning or polishing peas or beans before they are placed in the can, so that they present a smooth, bright appearance is described.

ASSIGNEE INDEX

(Numbers refer to patents cited)

Acme Canning Machines Co., 1,769,664
Benison, H. G., (See Crocker, Warren)
California Packing Corp., 1,889,189
California Peach Growers Inc., 1,312,381
Crocker, Warren and Benison, H. G., 1,834,018
Dentler, Charles H., (See Yourtee, Leon R.)
Dulany, Ralph O., 1,937,851
Hamilton, Henry E., 1,747,002
Harding Peeling Machine Co., 1,457,218
Hills Brothers Co., Inc., 1,464,511
Miller, Harry M., 1,394,138
Peerless Husker Co., 1,381,510
Scott-Viner Co., 1,760,041
Solana, Moises, 1,688,678
Sprague-Sells Corp., 1,683,703; 1,911,102
Thermokept Products Corp., 1,421,750
United States Government & People of the United States, 1,515,908; 1,615,700
Warren Seed Cleaning Co., Re. 16,981; Re. 17,003; 1,572,055; 1,609,636
West Highlands Citrus Association, 1,295,172
Yourtee, Leon R., and Dentler, Charles H., 1,360,335

PATENTEE INDEX

Altamirano, Alberto, 1,688,678
Bates, George G., 1,811,991; 1,924,098
Ballard, Carol B., 1,911,102
Beekhuis, Hermanus A., 1,312,381
Bell, John W., and Bell, Thomas J., 1,708,253
Bell, Thomas J., (See Bell, John W.)
Benton, Curran S., 1,677,015
Bernier, Henri, 1,889,189
Bost, William D., and Miller, Harry M., 1,394,138
Buckley, Jerry, 1,415,985; 1,507,951
Carmichael, Mead S., 1,760,041; 1,871,359
Cerruti, Antonio, 1,312,098
Chase, Frank F., 1,285,560
Coates, Jasper C., 1,834,018
Dekker, Gerret H., 1,286,554
Denman, James F., (See Gehring, Louis C.)
Duncan, Arthur L., 1,769,664
Du Pont, Alfred I., and Harding, Hiram R., 1,457,218
Eddy, Edgar D., 1,430,293
Farnsworth, Emery F., 1,544,894
Gaskill, John E., 1,460,648
Gehring, Louis C., and Denman, James F., 1,708,057
Griffin, Thomas F., and Smith, Frank, 1,770,916
Hamilton, Adolph, (See Hamilton, Henry E.)
Hamilton, Henry E., Krueger, Frederick C., and Hamilton, Adolph, 1,747,002
Harding, Hiram R., (See Du Pont, Alfred I.)
Harvey, Ralph, 1,502,852
Hiller, Stanley, 1,374,657
Howard, Burton J., and Stephenson, Charles H., 1,615,700
Howarth, John M., 1,263,672
Jackson, Hugh H., 1,295,172
Jeffries, Winfield S., 1,350,973
Kennedy, Harry E., (See Mulvany, Harry A.)
Krueger, Frederick C., (See Hamilton, Henry E.)
Kulluk, John, (See Struzas, John M.)
Lee, Ralph R., (See Miller, Carl P.)
Malone, Benjamin F., 1,486,351
McCabe, William M., 1,441,161
Meisler, Benjamin, 1,714,313
Miller, Carl P., and Lee, Ralph R., 1,403,092
Miller, Harry M., (See Bost, William D.)
Mulvany, Harry A., and Kennedy, Harry E., 1,916,633
Nell, Pieter J. G., and Schouten, Dirk J., 1,661,140
Nesbitt, Milton S., 1,521,787
Olney, George J., 1,474,284; 1,879,439; 1,899,632
Parker, George D., 1,252,833
Petit, Victor M., 1,899,209
Rieck, Charles A., 1,362,896
Roylance, Samuel, 1,476,221
Sawyer, Joseph W., 1,681,627
Schouten, Dirk J., (See Nell, Pieter J. G.)
Sells, Ogden S., 1,381,510; 1,583,703

Patentee Index (Contd.)

Smith, Frank, (See Griffin, Thomas F.)
Stansbury, John H., 1,937,851
Stebler, Fred, 1,684,896
Stephenson, Charles H., 1,515,908
Stephenson, Charles H., (See Howard, Burton J.)
Stott, Alexander W., 1,464,511
Struzas, John M., and Kulluk, John, 1,304,716
Taylor, Charles O., 1,491,211
Trovaton, Andrew, 1,562,929
Urschel, William E., 1,409,802; 1,409,803; 1,409,804
Voight, Albert P. J., 1,757,103
Warren, Harry R., 1,572,055; 1,609,636; Re. 16,981; Re 17,003
Warrenfeltz, Edward M., 1,360,335
White, Samuel J., 1,351,711
Willison, Walter W., 1,421,750
Zuckerman, Roscoe C., 1,643,596